

CLAIMS

The current claims, as they stand after the Examiner's amendments provided in the Notice of Allowance of December 27, 2004, are listed below.

Listing of Claims:

1.-67. (Canceled)

68. (Previously presented) A method of screening for compounds that inhibit production of an inflammatory cytokine, comprising:

- (a) providing a sample comprising a TAK1 and a TAB1;
- (b) contacting a test compound with the TAK1 and the TAB1;
- (c) detecting binding between the TAK1 and the TAB1; and
- (d) selecting a compound that inhibits the binding;

wherein the TAK1 of (a) is selected from the group consisting of

- (i) a protein comprising amino acids 76 to 303 of SEQ ID NO:2; and
- (ii) a protein that binds to amino acids 437 to 504 of SEQ ID NO:4 and comprises an amino acid sequence encoded by a DNA sequence that hybridizes with the complement of nucleotides 408 to 1091 of SEQ ID NO:1 under washing conditions of 42°C, 5 x SSC, 0.1% sodium dodecyl sulfate, and 50% formamide;

and wherein the TAB1 of (a) is selected from the group consisting of

- (iii) a protein comprising amino acids 437 to 504 of SEQ ID NO:4; and
- (iv) a protein that binds to amino acids 76 to 303 of SEQ ID NO:2 and comprises an amino acid sequence encoded by a DNA that hybridizes with the complement of nucleotides 1338 to 1541 of SEQ ID NO:3 under washing conditions of 42°C, 5 x SSC, 0.1% sodium dodecyl sulfate, and 50% formamide;

wherein the compound inhibits production of an inflammatory cytokine produced in response to lipopolysaccharide (LPS) or IL-1 α .

69. (Previously presented) The method of claim 68, wherein the TAK1 and/or the TAB1 is fused with a peptide.

70. (Previously presented) The method of claim 68, wherein the TAK1 or the TAB1 is linked to a support.

71. (Previously presented) The method of claim 1, wherein a label is attached to the TAK1 or the TAB1 and the binding is detected by detecting or measuring the label.

72. (Previously presented) The method of claim 68, wherein the binding is detected by detecting or measuring the TAB1 bound to the TAK1 with a primary antibody against TAB1 or a primary antibody against a peptide fused with the TAB1.

73. (Previously presented) The method of claim 68, wherein the binding is detected by detecting or measuring the TAK1 bound to the TAB1 with a primary antibody against TAK1 or a primary antibody against a peptide fused with the TAK1.

74. (Previously presented) The method of claim 68, wherein the binding is detected by detecting or measuring the TAB1 bound to the TAK1 with a primary antibody against the TAB1 or a primary antibody against a peptide fused with TAB1, and a secondary antibody against the primary antibody.

75. (Previously presented) The method of claim 68, wherein the binding is detected by detecting or measuring the TAK1 bound to the TAB1 with a primary antibody against TAK1 or a primary antibody against a peptide fused with the TAK1, and a secondary antibody against the primary antibody.

76. (Previously presented) The method of claim 74, wherein the primary antibody or the secondary antibody is labeled with a radioisotope, enzyme, or fluorescent substance.

77. (Previously presented) The method of claim 68, wherein the TAK1 of (a) comprises amino acids 76 to 303 of SEQ ID NO:2.

78. (Previously presented) The method of claim 68, wherein the TAK1 of (a) is a protein that binds to amino acids 437 to 504 of SEQ ID NO:4 and comprises an amino acid sequence encoded by a DNA that hybridizes with the complement of nucleotides 408 to 1091 of SEQ ID NO:1 under washing conditions of 42°C, 5 x SSC, 0.1% sodium dodecyl sulfate, and 50% formamide.

79. (Previously presented) The method of claim 68, wherein the TAK1 of (a) is a protein that binds to amino acids 437 to 504 of SEQ ID NO:4 and comprises an amino acid sequence that is encoded by a DNA that hybridizes with the complement of nucleotides 408 to 1091 of SEQ ID NO:1 under washing conditions of 60°C, 0.1 x SSC, and 0.1% sodium dodecyl sulfate.

80. (Previously presented) The method of claim 68, wherein the TAB1 of (a) comprises amino acids 437 to 504 of SEQ ID NO:4.

81. (Previously presented) The method of claim 68, wherein the TAB1 of (a) is a protein that binds to amino acids 76-303 of SEQ ID NO:2 and comprises an amino acid sequence encoded by a DNA that hybridizes with the complement of nucleotides 1338 to 1541 of SEQ ID NO:3 under washing conditions of 42°C, 5 x SSC, 0.1% sodium dodecyl sulfate, and 50% formamide.

82. (Previously presented) The method of claim 68, wherein the TAB1 of (a) is a protein that binds to amino acids 76-303 of SEQ ID NO:2 and comprises an amino acid sequence encoded by a DNA that hybridizes with the complement of nucleotides 1338 to 1541 of SEQ ID NO:3 under washing conditions of 60°C, 0.1 x SSC, and 0.1% sodium dodecyl sulfate.

83. (Previously presented) The method of claim 68, wherein the inflammatory cytokine is IL-1, TNF, IL-10, or IL-6.

84. (Previously presented) The method of claim 68, wherein the inflammatory cytokine is IL-1.

85. (Previously presented) The method of claim 68, wherein the inflammatory cytokine is TNF.

86. (Previously presented) The method of claim 68, wherein the inflammatory cytokine is IL-6.

87. (Previously presented) The method of claim 68, wherein the inflammatory cytokine is IL-10.